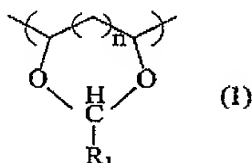


Complete set of claims

1. (Previously Amended) A negative aqueous photoresist composition, comprising:

a) a polymer comprising at least one unit with structure (1)

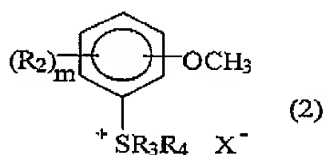


where R_1 is hydrogen or (C_1-C_4) alkyl and $n = 1-4$;

b) a water-soluble photoactive compound;

c) a crosslinking agent; and,

d) a solvent composition, and further where the photoactive compound has structure (2),



where,

R_2 is hydrogen, alkyl, $-O(\text{alkyl})$, $-(\text{alkyl})OH$, hydroxyphenyl or multihydroxyphenyl,

R_3 and R_4 are independently (C_1-C_4) alkyl,

$m = 1-3$, and,

X^- is an anion.

2. (Delete)

3. (Original) The photoresist composition according to claim 1, where solvent composition is water or a mixture of water and a (C_1-C_4) alkyl alcohol.

Serial No. 09/966,958
Filing Date 09/28/2001

Customer No. 26,289
Attorney Docket 2001US307

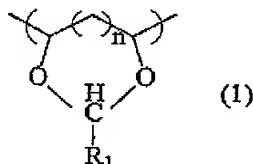
4. (Original) The photoresist composition according to claim 1, where the polymer contains additional nonaromatic units.
5. (Original) The photoresist composition according to claim 4, where the nonaromatic units are selected from a group consisting of ethylenic alcohol, ethylenic pyrrolidone, ethylenic acetate, and methylene alcohol.
6. (Original) The photoresist composition according to claim 1, where the polymer contains at least 10 mole% of the unit of structure 1.
7. (Original) The photoresist composition according to claim 1, where $n = 1$ and R_1 is selected from methyl, ethyl, propyl and butyl.
8. (Previously Amended) The photoresist composition according to claim 2 1, where the photoactive compound is (4-methoxyphenyl)dimethylsulfonium trifluoromethanesulfonate.
9. (Original) The photoresist composition according to claim 1, where the crosslinker is selected from melamine resins, urea resins and glycolurils.
10. (Original) The photoresist composition according to claim 3, where the alcohol is isopropanol.
11. (Currently amended) A process for imaging a negative photoresist comprising the steps of:

Serial No. 09/966,958
Filing Date 09/28/2001

Customer No. 26,289
Attorney Docket 2001US307

a) forming on a substrate a negative aqueous photoresist composition of claim 1, comprising:

i) a polymer comprising at least one unit with structure (1)



where R₁ is hydrogen or (C₁-C₄) alkyl and n = 1-4;

ii) a water-soluble photoactive compound;

iii) a crosslinking agent; and,

iv) a solvent composition;

b) image-wise exposing the photoresist coating where the image-wise exposure wavelength is below 260nm ;

c) postexposure baking the photoresist coating; and

d) developing the photoresist coating with a developer.

12. (Deleted)

13. (Original) The process according to claim 11, where the developer is selected from water, a mixture of water and a (C₁-C₄) alkyl alcohol, mixture of water and surfactant, and an aqueous base solution.

14. (Original) The process according to claim 13, where the alcohol is isopropanol.